

I am a professional engineer registered in the state of Indiana. I am a retired engineering executive of Indianapolis Power & Light Co. I am also a ham radio operator. I am very familiar with distribution system design, communications design, and power line carrier operations.

I have a serious problem with the gist of the commission's position regarding power line carrier for Broadband applications. While it may seem logical that the utility may be able to minimize interference from BBP, and will be able to respond to any and all interference complaints, and you the FCC can regulate and police those complaints, my experience as a utility engineer and management executive would lead me to an opposite conclusion.

First, no utility's distribution system is in a good enough condition to handle BPL without serious radiation of signals. Secondly, none of the utilities have enough resources to handle the complaints which would result from that radiation. Finally, the FCC doesn't have the resources to handle the complaints which surely will occur. So, the idea that the system would be self policing with respect to interference is totally ludicrous.

I have supervised company areas responsible for radio interference. I have also found numerous instances of radio interference cause by arcing, bad equipment, etc on our system. I would report them to our radio people. But, they were also responsible for keeping the company radio system working, They never had time to respond to my observations of problems.

We also used power line carrier on transmission lines for line protection. Please realize that this system had major radiation problems, but on a frequency which caused no interference to other services. BPL uses frequencies which will cause serious interference with public service radios (police, fire, national emergency, etc), ham radio, and international public broadcasting.

So, in summary, as a registered professional engineer and retired utility engineering manager, I see no way that BPL can be implemented by any electric utility without serious repercussions. Interference will occur on a wide spread basis, utilities will not have the resources (or financial desire to provide the resources) to correct the problem, and you the FCC will not have the resources to respond to the overload of resulting complaints.

I own considerable stock in public utilities, so I would benefit greatly from successful implementation of BPL. But as a stockholder, I am also concerned with the potential liability from BPL interference.

The theory that the FCC is using to approve BPL's ability to avoid interference and correct problems is understandable. But the reality of the condition of the electrical facilities to cause interference, the utilities' lack of resources to investigate problems, and finally the FCC's lack of resources to adequately investigate the overwhelming number of complaints totally disprove the wisdom of that theory.

I urge the commission to delay approval of BPL. Rather, approve several large and random test areas, and monitor them closely. I am sure that they will result in serious interference which the utility will not handle properly, unless they add considerable staff to do so because they are a test site. And if BPL proves workable in those situations, then approve it everywhere. As an engineer, and former utility engineering manager, I am confident that a fair test will prove that BPL and the rest of the radio community are incompatible.

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